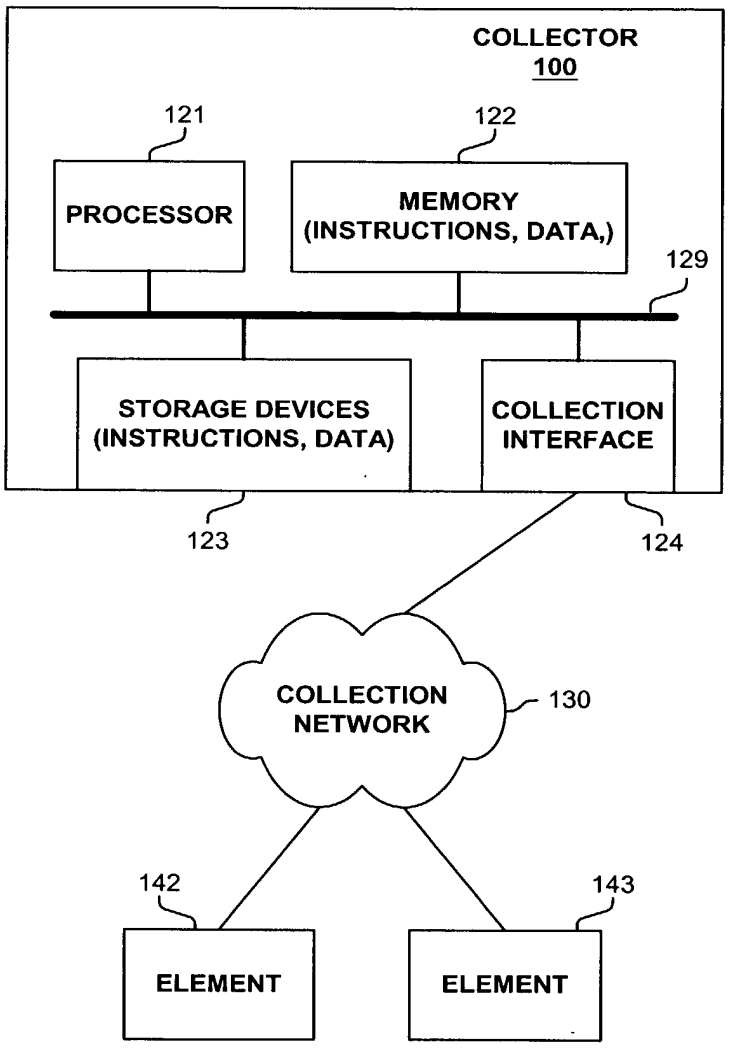
COLLECTOR
100
121
122
PROCESSOR
MEMORY
(INSTRUCTIONS, DATA,)
129
STORAGE DEVICES
(INSTRUCTIONS, DATA)
COLLECTION
INTERFACE
123
124
COLLECTION
NETWORK
130
142
143
ELEMENT
ELEMENT

FIGURE 1A

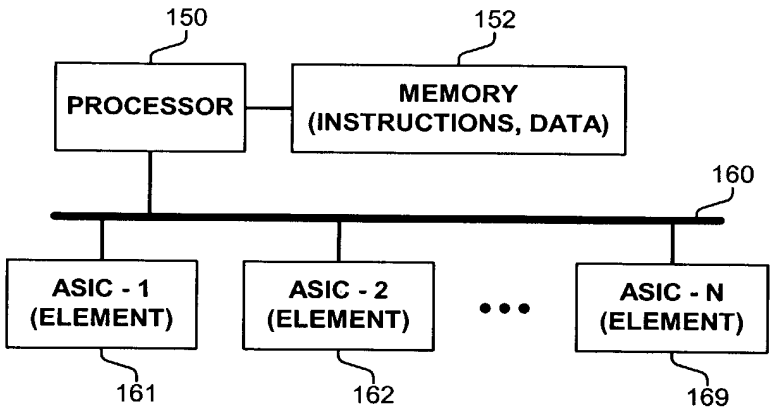
150
152
PROCESSOR
MEMORY
(INSTRUCTIONS, DATA)
160
ASIC - 1
(ELEMENT)
ASIC - 2
(ELEMENT)
ASIC - N
(ELEMENT)
161
162
169

FIGURE 1B

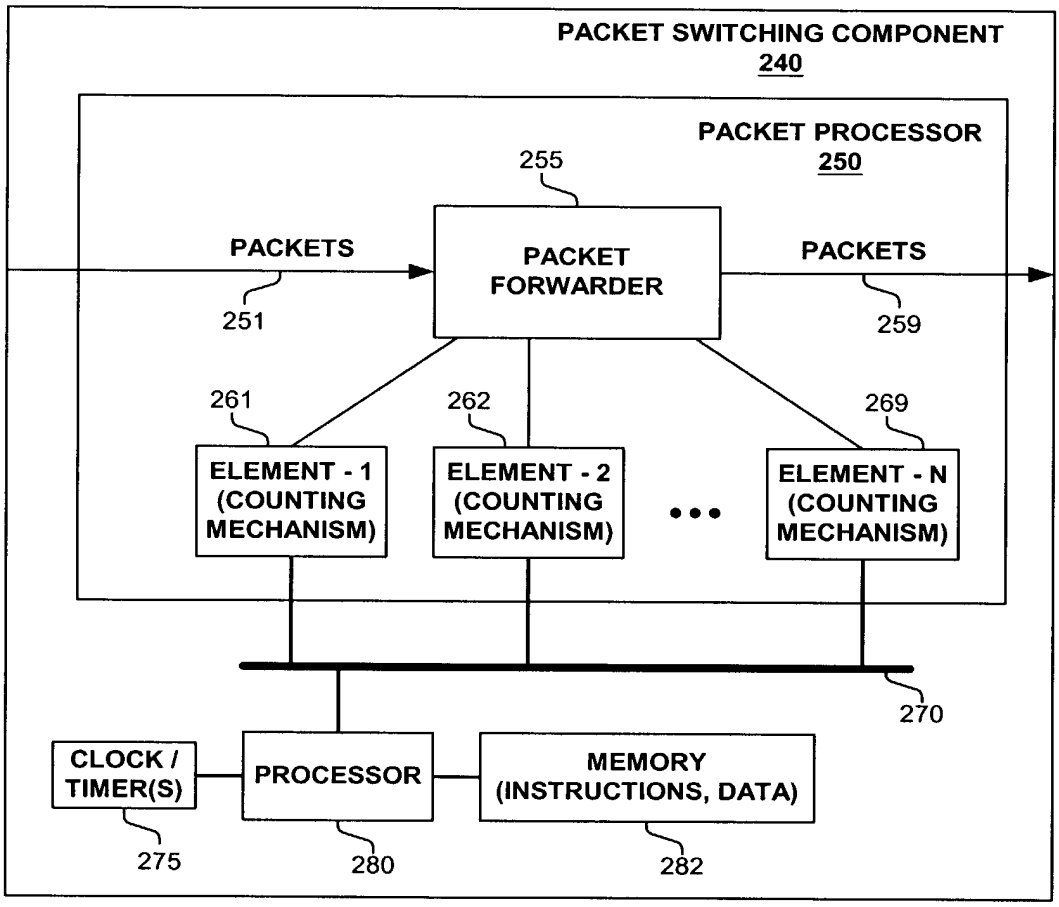
PACKET SWITCHING COMPONENT
240
PACKET PROCESSOR
250
255
PACKETS
251
PACKET FORWARDER
PACKETS
259
261
262
269
ELEMENT - 1 (COUNTING MECHANISM)
ELEMENT - 2 (COUNTING MECHANISM)
ELEMENT - N (COUNTING MECHANISM)
270
CLOCK / TIMER(S)
275
PROCESSOR
280
MEMORY (INSTRUCTIONS, DATA)
282

FIGURE 2

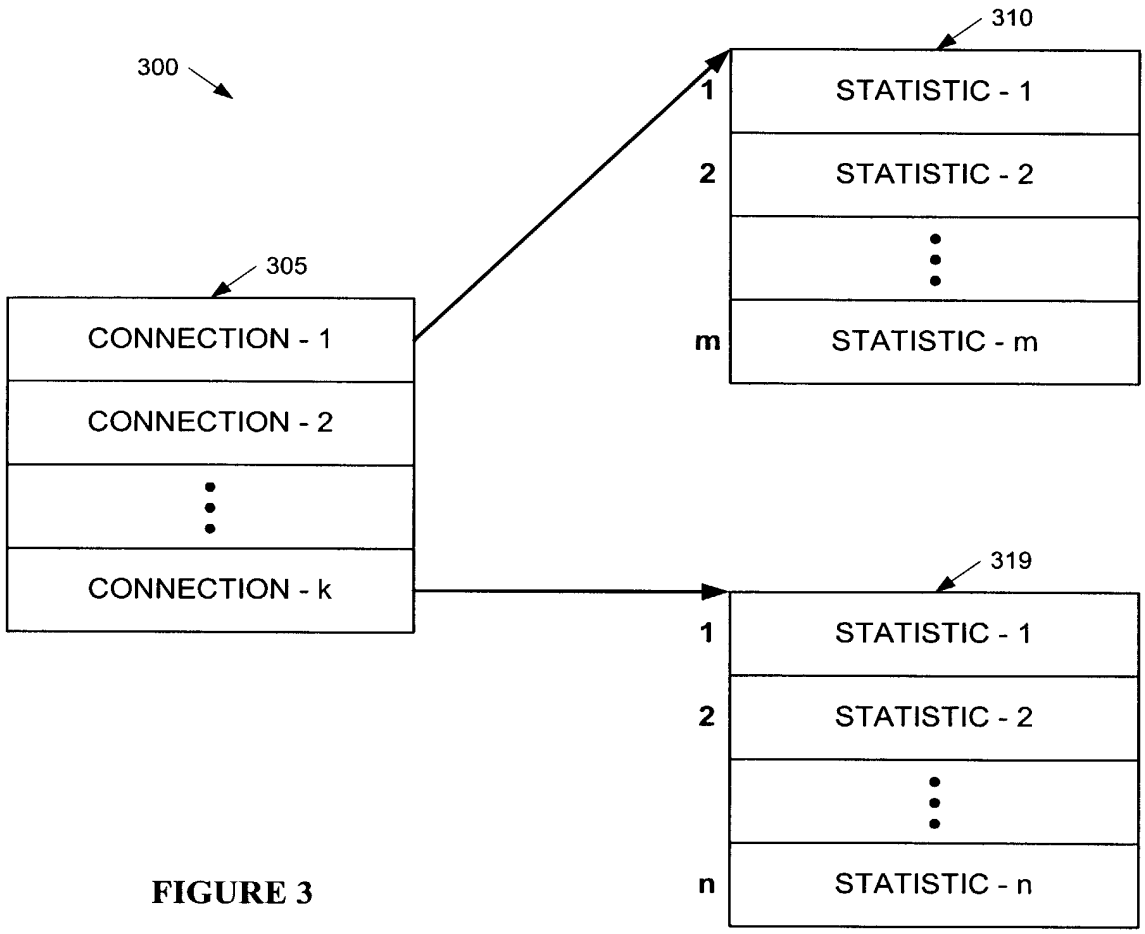
300
305
CONNECTION - 1
CONNECTION - 2
CONNECTION - k
310
1
STATISTIC - 1
2
STATISTIC - 2
m
STATISTIC - m
319
1
STATISTIC - 1
2
STATISTIC - 2
n
STATISTIC - n

FIGURE 3

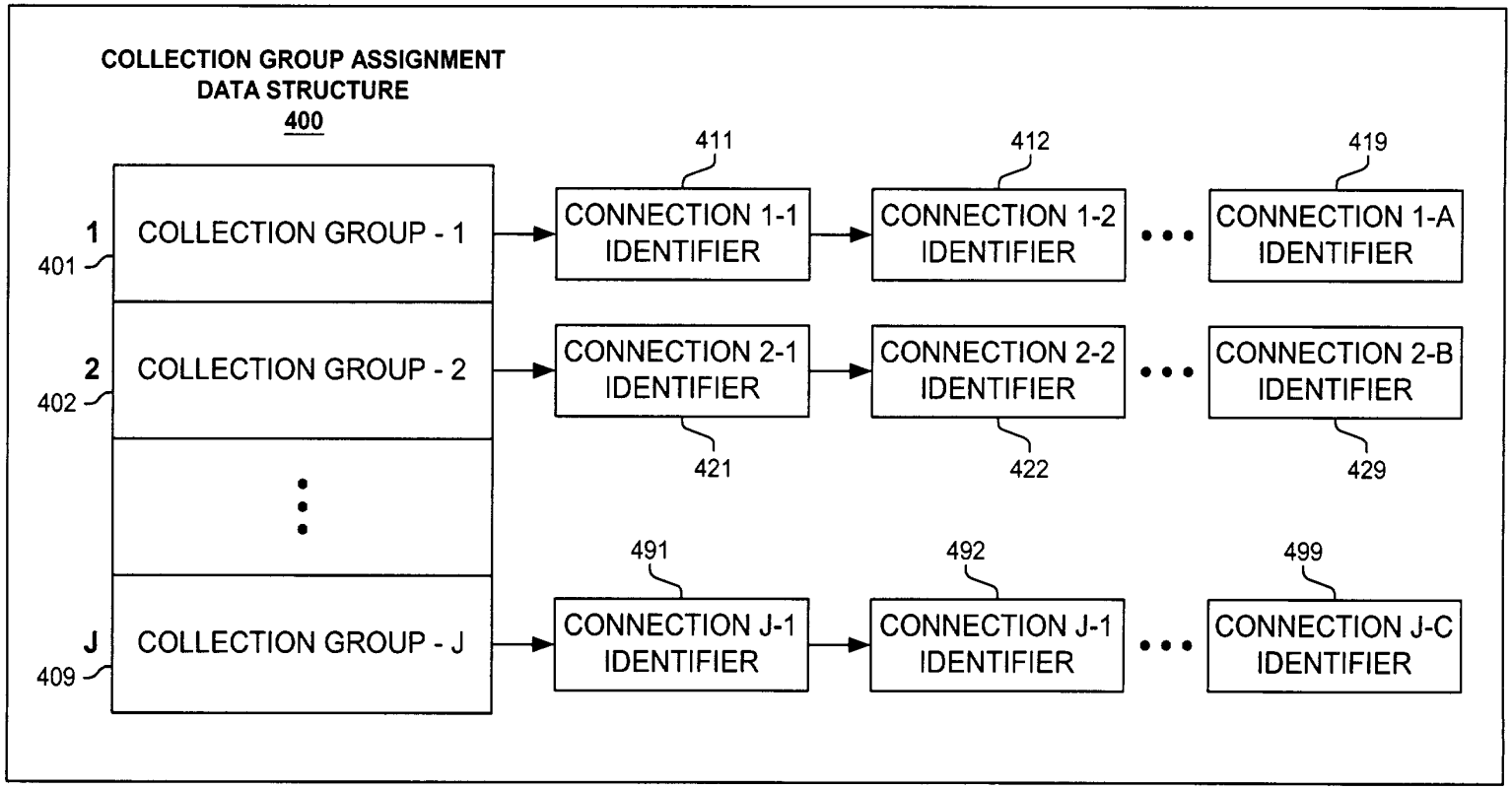
COLLECTION GROUP ASSIGNMENT
DATA STRUCTURE
400
1
401
COLLECTION GROUP - 1
2
402
COLLECTION GROUP - 2
J
409
COLLECTION GROUP - J
411
CONNECTION 1-1
IDENTIFIER
412
CONNECTION 1-2
IDENTIFIER
419
CONNECTION 1-A
IDENTIFIER
CONNECTION 2-1
IDENTIFIER
421
CONNECTION 2-2
IDENTIFIER
422
CONNECTION 2-B
IDENTIFIER
429
491
CONNECTION J-1
IDENTIFIER
492
CONNECTION J-1
IDENTIFIER
499
CONNECTION J-C
IDENTIFIER

FIGURE 4

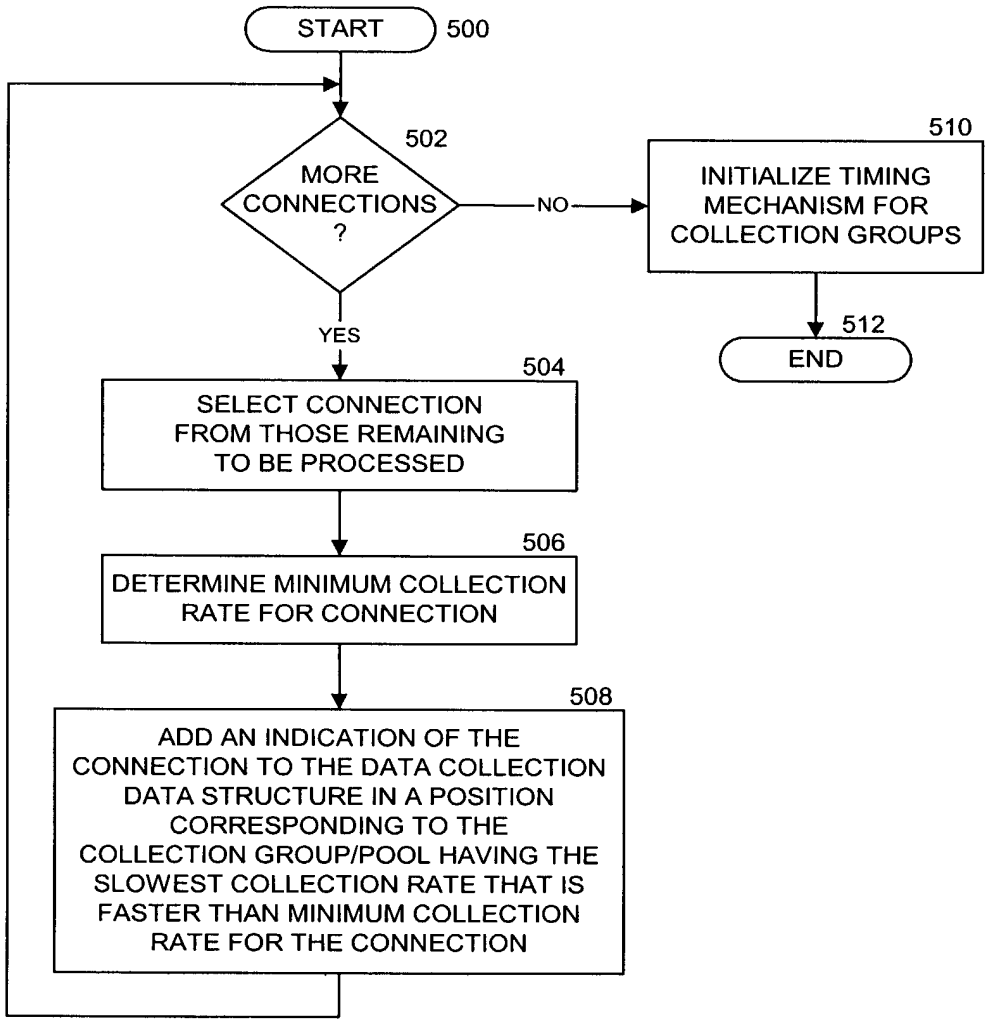
START
500
502
MORE CONNECTIONS ?
NO
510
INITIALIZE TIMING MECHANISM FOR COLLECTION GROUPS
512
END
YES
504
SELECT CONNECTION FROM THOSE REMAINING TO BE PROCESSED
506
DETERMINE MINIMUM COLLECTION RATE FOR CONNECTION
508
ADD AN INDICATION OF THE CONNECTION TO THE DATA COLLECTION DATA STRUCTURE IN A POSITION CORRESPONDING TO THE COLLECTION GROUP/POOL HAVING THE SLOWEST COLLECTION RATE THAT IS FASTER THAN MINIMUM COLLECTION RATE FOR THE CONNECTION

FIGURE 5A

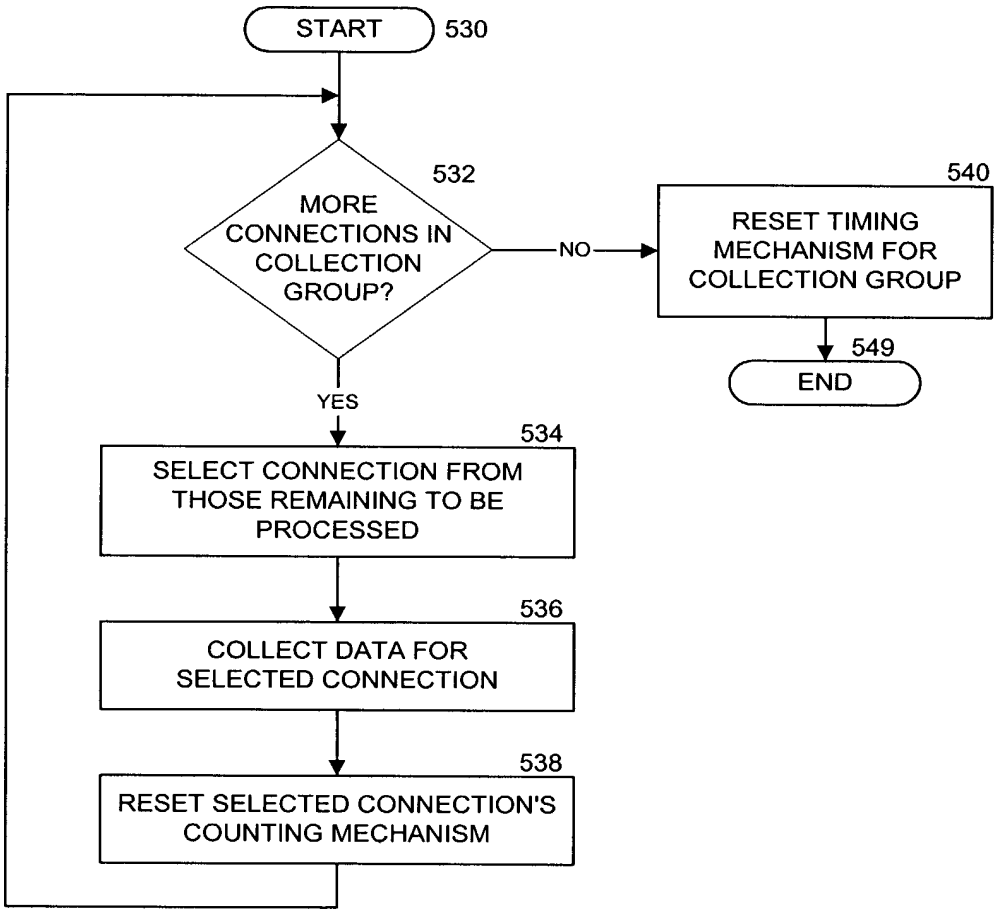
START
530
532
MORE CONNECTIONS IN COLLECTION GROUP?
NO
540
RESET TIMING MECHANISM FOR COLLECTION GROUP
549
END
YES
534
SELECT CONNECTION FROM THOSE REMAINING TO BE PROCESSED
536
COLLECT DATA FOR SELECTED CONNECTION
538
RESET SELECTED CONNECTION'S COUNTING MECHANISM

FIGURE 5B